

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division

E.I. DUPONT DE NEMOURS AND COMPANY,

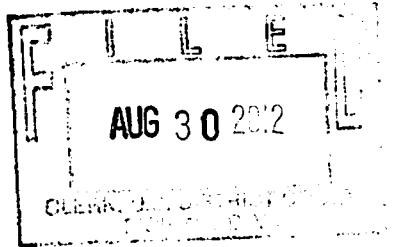
Plaintiff,

v.

Civil Action No. 3:09cv58

KOLON INDUSTRIES, INC.,

Defendant.



MEMORANDUM OPINION

This matter is before the Court on the MOTION FOR PERMANENT INJUNCTION (Docket No. 1533) filed by Plaintiff E.I. Du Pont de Nemours and Company ("DuPont"). For the reasons set forth below, the motion is granted to the extent herein described.

BACKGROUND

Following a seven-week trial, a jury found that Kolon Industries, Inc. ("Kolon") violated the Virginia Uniform Trade Secrets Act ("VUTSA"), Va. Code Ann. § 59.1-338A. Using a fifty-one page verdict form, the jury specifically found that Kolon willfully and maliciously misappropriated and used 149 DuPont trade secrets for the manufacture of DuPont's para-aramid fiber, Kevlar®.¹ (Docket No. 1514). The jury returned a verdict in

¹ DuPont initially claimed 155 trade secrets at trial, but it voluntarily withdrew five before jury deliberations began, and the jury determined that two trade secrets were duplicative.

favor of DuPont, and against Kolon in the amount of \$919.9 million in compensatory damages. The Court assessed punitive damages in the amount of \$350,000. Thereafter, DuPont filed its Motion for Permanent Injunction, pursuant to Virginia Code Ann. § 59.1-337A.

STATEMENT OF FACTS

The record shows that Kolon had attempted in the 1980s and 1990s to develop a commercial para-aramid product. That lengthy effort was unsuccessful and, in 1995, Kolon abandoned the effort. (Trial Tr. 5067:12-15, Docket No. 1928; Kolon's Opp. Perm. Inj., Docket Nos. 1619 & 1641, Exh. 3; Mem. Op. Mot. Sanctions Re. Kolon's Spoliation of Evidence, at 3, Docket No. 1249, 803 F. Supp. 2d 469, 475 (E.D. Va. July 21, 2011); Mem. Op. Mot. Summ. J., at 5 n. 1, Docket No. 637, Civil Action No. 3:11CV622, 2012 WL 1155218, *2 n.1 (E.D. Va. Apr. 5, 2012)).

In approximately 2002, Kolon's top executive directed that the company renew its efforts to produce para-aramid, and Kolon did so. In 2005, Kolon announced that it soon would enter the para-aramid fiber market with its product, Heracron®. Id. Thereafter, the company began to produce its Heracron® product, but Kolon's efforts were less than successful. Because the market for para-aramid fiber was regarded as a lucrative one, the company's top management again placed success in the manufacture of Heracron® as a top priority.

Kolon continued its development efforts and was making some progress toward success, but it encountered significant problems in quality control and in efficient production, both of which kept Heracron® from being competitive with Kevlar® and Teijin's product, Twaron®. So, with the knowledge and approval of its chief executive, Kolon set out to learn how DuPont, one of the world's leading para-aramid producers and Kolon's competitor, manufactured Kevlar® in an effort to solve Kolon's quality control and production problems. To that end, Kolon made the deliberate decision to acquire DuPont's trade secrets and confidential information.

To achieve its objective, Kolon retained, as consultants, former DuPont employees whom it paid to divulge DuPont's trade secrets. One of those former employees was Michael Mitchell, who had worked for DuPont since 1982, and whose employment was terminated by DuPont in February 2006. Shortly after the termination of his employment with DuPont, Kolon approached Mitchell about the possibility of a consulting arrangement. In April 2007, Mitchell and Kolon entered into a formal consulting arrangement. In 2010, Mitchell was convicted, upon a plea of guilty, of stealing numerous trade secrets concerning the making of Kelvar® and passing them to Kolon. In meetings with Kolon, Mitchell answered many detailed technical questions respecting those trade secrets. Also, Mitchell had placed on his personal

computer more details about those, and other, trade secrets respecting the manufacture of Kevlar®. The record showed that, during a luncheon recess from a meeting in Korea, Kolon surreptitiously copied those secrets from Mitchell's computer.

Kolon also engaged other former DuPont employees as consultants during the relevant time period. The trial record is replete with documents (and recordings) that shows why Kolon needed the stolen trade secrets and how it used them in every stage of its own production of Heracron®.

At trial, DuPont presented persuasive evidence obtained from inspection of Kolon's manufacturing facilities and from Kolon's own documents that showed how Kolon had incorporated the stolen DuPont trade secrets into Kolon's own operations, including evidence that Kolon even had copied machine configurations that DuPont had used solely because of its need to fit machinery into limited space in its plant. DuPont prepared a forty-six page description of the evidence of Kolon's use, which was attached as Exhibit 5 to DuPont's Opposition to Kolon's Motion for Judgment as a Matter of Law (Docket Nos. 1695 & 1711). Exhibit 5 accurately describes the extensive use made by Kolon of the misappropriated trade secrets. The exhibit sets forth specific references to the trial transcript and exhibits. Exhibit 5 is incorporated here because it demonstrates and

documents the extensive misappropriation and use found by the jury which was clearly proved at trial.

On the basis of the record, the Court finds that the use of the stolen trade secrets by Kolon was integral and essential to Kolon's manufacture of Heracron®. The record also proves that the misappropriated trade secrets are inextricably connected with Kolon's manufacture of Heracron®. The record also establishes, and the Court so finds, that there is a strong likelihood, if not a certainty, that Kolon continues to use, and will continue to use if not enjoined, the stolen trade secrets in its manufacture of Heracron®. DuPont seeks an injunction that will permanently prohibit Kolon from manufacturing para-aramid fiber, prohibit Kolon from any further disclosure of the stolen trade secrets within the Kolon organization or otherwise, and require that Kolon return the misappropriated trade secrets (and any copies or memorialization thereof).

After consideration of the initial briefs, the Court asked for supplemental briefing on two legal issues: first, whether applying the standard for injunctive relief in eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006), to a post-verdict request for permanent injunctive relief under the VUTSA would trench upon the rule of Erie R.R. Co. v. Tompkins, 304 U.S. 64

(1938);² and second, if Virginia law is applied, what are the factors under Virginia law that a district court should consider in determining whether to grant an injunction under the VUTSA. (Hr'g Tr., Mar. 28, 2012, Docket No. 1979.) The supplemental briefs have been filed, and this matter is ripe for decision.

DISCUSSION

The threshold issue presented by DuPont's motion is whether DuPont must meet the requirements for injunctive relief set out in eBay in order to obtain a permanent injunction where, as here, it has proved violations of the VUTSA. In eBay, the Supreme Court of the United States held that "a plaintiff seeking a permanent injunction must satisfy a [familiar] four-factor test before a court may grant such relief." eBay, supra, at 391.³ The Court cited two decisions as exemplary of this principle: Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982) which applied that principle under the Federal Water Pollution

² "Under the Erie doctrine, the federal courts must apply the substantive law of the forum state in diversity of citizenship cases." Moore's Federal Practice § 65.07[2] (2011). Since Erie, federal courts have struggled to distinguish substance from procedure.

³ "A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." eBay, 547 U.S. at 391.

Control Act;⁴ and Amoco Production Co. v. Gambell, 480 U.S. 531 (1987) which applied that principle to the Alaska National Interest Lands Conservation Act⁵ and the Outer Continental Shelf Lands Act.⁶ And, in eBay, the Court held that those "familiar principles apply with equal force to disputes arising under the Patent Act." Id. In so doing, the Court analogized the Patent Act to the Copyright Act, another federal statute. eBay, supra, at 392.

In its concluding paragraph, the Court stated:

We hold that the decision whether to grant or deny injunctive relief rests within the equitable discretion of the district courts, and that such discretion must be exercised consistent with traditional principles of equity, in patent disputes no less than in other cases governed by such standards.

eBay, supra, at 394. The Court did not explain the phrase "no less than in other cases governed by such standards." However, by citing authorities decided under federal statutes, the Court made clear that, at least, those "familiar principles" governed the decision whether to grant or deny injunctions in cases arising under federal statutes.

In eBay, the Supreme Court made clear that, in such cases, irreparable injury and the unavailability of an adequate remedy

⁴ 33 U.S.C. § 1251.

⁵ 16 U.S.C. § 3120.

⁶ 43 U.S.C. § 1331.

at law must be shown as part of the four traditional elements for injunctive relief. The Supreme Court of Virginia has held, just as clearly, that:

When a [Virginia] statute empowers a court to grant injunctive relief, the party seeking an injunction is not required to establish the traditional prerequisites, i.e., irreparable harm and lack of an adequate remedy at law, before the injunction can issue. All that is required is proof that the statute or regulation has been violated.

Va. Beach S.P.C.A., Inc. v. S. Hampton Roads Veterinary Ass'n, 329 S.E.2d 10, 13 (Va. 1985) (citing Carbaugh v. Solem, 302 S.E.2d 33, 35 (Va. 1983)) (emphasis added). In Levisa Coal Co. v. Consolidation Coal Co., 662 S.E.2d 44, 53 (Va. 2008), cert. denied, 129 S. Ct. 2158 (2009),⁷ a decision issued after eBay, the Supreme Court of Virginia cited both Va. Beach S.P.C.A. and Carbaugh with approval. Here, as in Va. Beach S.P.C.A. and Carbaugh, the plaintiff has proved a violation of a Virginia statute that authorizes injunctive relief upon proof of a violation of its terms.

Whether to apply the rule of eBay or the Virginia principles in deciding to grant or deny injunctive relief

⁷ In Carbaugh, the state statute at issue eliminated the inadequate remedy at law requirement for the injunctive relief therein authorized, but that distinction was not mentioned in either Va. Beach S.P.C.A. or Levisa Coal.

presents a significant issue under Erie. That issue must be sorted out before DuPont's motion can be resolved.

A. Whether applying the standard for injunctive relief in eBay to a post-verdict request for permanent injunctive relief under the VUTSA would trench upon the rule of Erie.

1. **Background**

The VUTSA provides in relevant part:

Actual or threatened misappropriation may be enjoined. Upon application to the court, an injunction shall be terminated when the trade secret has ceased to exist, but the injunction may be continued for an additional reasonable period of time in order to eliminate commercial advantage that otherwise would be derived from the misappropriation.

Va. Code Ann. § 59.1-337A (2011) (emphasis added). DuPont argues that the proof of the violation of the VUTSA alone entitles it to a permanent injunction,⁸ taking the view that "[t]he Court may issue a permanent injunction based solely upon the mere fact that Kolon has been found to have violated a Virginia statute allowing injunctive relief." (Pl.'s Mem. Supp. Perm. Inj. at 6, Docket Nos. 1535 & 1553.)

To support this contention, DuPont relies, on the previously cited Virginia decisions and on Capital Tool & Mfg. Co., Inc. v. Maschinenfabrik Herkules, Hans Thoma GmbH, 837 F.2d

⁸ DuPont also argues that "[n]otwithstanding the applicability of the VUTSA, the record also clearly establishes that the four traditional equitable factors favor an injunction in this case." (Pl.'s Mem. Supp. Perm. Inj. at 8.)

171, 172 (4th Cir. 1988) wherein the Fourth Circuit held that: "[A] complainant need not allege or prove irreparable harm when it involves a statute that authorizes injunctive relief. All that need be proved is a violation of the statute." (emphasis added) (citing Va. Beach S.P.C.A., Inc. v. S. Hampton Roads Veterinary Ass'n, 329 S.E.2d 10 (Va. 1985) and Env'tl. Def. Fund., Inc. v. Lamphier, 714 F.2d 331 (4th Cir. 1983)).

In Capital Tool, the Fourth Circuit observed that, in Va. Beach S.P.C.A. and Lamphier, "the complainant proved a statutory violation after a full trial on the merits, and the court properly granted a final injunction to enforce the statute without requiring proof of irreparable harm." Id. The Fourth Circuit went on to hold that "the same principle would govern the grant of a final injunction in diversity cases" and "[t]here is no reason to exclude from Erie state substantive law regarding the issuance of final injunctions."⁹ Id.

⁹ The Fourth Circuit's decision affirming the denial of a preliminary injunction in Capital Tool was based in part on "the difference between final and preliminary injunctions." It held that "a final injunction to enforce the statute without requiring proof of irreparable harm" could be granted where the complainant already had proved a statutory violation in a trial on the merits, but that "the purpose of a preliminary, as opposed to a final, injunction 'is merely to preserve the relative positions of the parties until a trial on the merits can be held,'" so the court must balance the hardship the parties will suffer pending trial according to the Blackwelder factors. 837 F.2d at 172 (citation omitted). In Real Truth About Obama, Inc. v. Fed. Election Comm'n, 575 F.3d 342, 347 (4th Cir. 2009), the Fourth Circuit rejected the Blackwelder

Relying on MicroStrategy, Inc. v. Business Objects, S.A., 369 F. Supp. 2d 725 (E.D. Va. 2005), DuPont contends that, “[b]ecause the determination as to whether to grant an injunction is a substantive issue, this Court – sitting in diversity – must apply Virginia state law.” (Pl.’s Mem. Supp. Perm. Inj. at 7.) In MicroStrategy, 369 F. Supp. 2d at 732, in the context of the VUTSA, the district court observed that federal courts apply “federal law to procedural matters and state law to substantive matters,” citing Erie, 304 U.S. at 78, and held that “[a] permanent injunction is a creature of equity designed to enforce substantive law rights.” Id. (citation omitted).

Therefore, DuPont’s argument continues, the VUTSA and Virginia law, not Fed. R. Civ. P. 65 and not federal decisional law, such as eBay, set the standard for deciding whether a permanent injunction should issue. Citing a decision from the

test: “Because of its differences with the Winter [v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008)] test, the Blackwelder balance-of-hardship test may no longer be applied in granting or denying preliminary injunctions in the Fourth Circuit, as the standard articulated in Winter governs the issuance of preliminary injunctions not only in the Fourth Circuit but in all federal courts.” The view that preliminary injunctions and permanent injunctions should be addressed differently also has recently been rejected. In Bethesda Softworks, L.L.C. v. Interplay Entm’t Corp., 452 Fed. Appx. 351, 355, 2011 WL 5084587, at *3 (4th Cir. Oct. 26, 2011) (per curiam), a copyright case, the Fourth Circuit stated that it agreed with the other courts of appeals that “eBay applies to permanent and preliminary injunctions with equal force.”

Supreme Court of Virginia issued two years after the eBay decision, DuPont argues that Virginia law is consistent that a party seeking injunctive relief pursuant to a Virginia statute is not required to establish the "traditional prerequisites" of an injunction. See Levisa Coal, supra, at 53 ("We have also observed that unless a party is entitled to an injunction pursuant to a statute, a party must establish the 'traditional prerequisites, i.e., irreparable harm and lack of an adequate remedy at law' before a request for injunctive relief will be sustained.") (citations omitted).

Kolon disagrees with DuPont's position, arguing that, because of eBay, the Court must apply the traditional four-factor test. To support its argument, Kolon relies on Guaranty Trust Co. v. York, 326 U.S. 99 (1945), decided seven years after Erie, and it cites several passages from York that seem helpful to its argument. First, Kolon relies on the passage: "[t]hat a State may authorize its courts to give equitable relief unhampered by any or all such restrictions [to which equitable relief in a federal court is subject] cannot remove these fetters from the federal courts." 326 U.S. at 105-06. And, then Kolon recites the text that says: "State law cannot define the remedies which a federal court must give simply because a federal court in diversity jurisdiction is available as an

alternative tribunal to the State's courts." Id. at 106 (citing Pusey & Jones v. Hanssen, 261 U.S. 491 (1923)).

Kolon also relies on the statement in eBay that: "this Court has consistently rejected invitations to replace traditional equitable considerations with a rule that an injunction automatically follows a determination that a copyright has been infringed." 547 U.S. at 392-93. Thus, citing a post-eBay Fourth Circuit decision decided under the federal Copyright Act, Christopher Phelps & Assocs., L.L.C. v. Galloway, 492 F.3d 532, 543 (4th Cir. 2007), Kolon argues that "the Fourth Circuit has rejected the contention that plaintiffs who prevail under a statute authorizing injunctive relief are automatically entitled to such relief," (Def.'s Mem. Opp'n Perm. Inj. at 9), and, says Kolon, the eBay decision and the statement in Phelps & Assocs. mean that in the Fourth Circuit the traditional four-factor test applies to "any type of case," whether the claim is based on federal law or state law.

Looking at the issue from a historical perspective, Kolon notes also that "the remedial equitable jurisdiction of federal courts is intended to be uniform throughout the country, no matter the source of substantive law or whether the court sits in diversity" and that such powers "are not subject to Erie analysis." (Def.'s Supp'l Mem. Opp'n Perm. Inj. at 2.) According to Kolon, York "excepted equitable remedies from the

Erie outcome-determination test." (Def.'s Supp'l Mem. Opp'n Perm. Inj. at 6.)

To support that conclusion, Kolon relies on two related observations from York. First, York stated that: "Partly because the States in the early days varied greatly in the manner in which equitable relief was afforded and in the extent to which it was available . . . , Congress provided that 'the forms and modes of proceeding in suits . . . of equity' would conform to the settled uses of courts of equity." York, 326 U.S. at 104-05 (citing Section 2, 1 Stat. 275, 276, 28 U.S.C. § 723). Secondly, York noted: "But this enactment gave the federal courts no power that they would not have had, in any event, when courts were given 'cognizance,' by the first Judiciary Act, of suits 'in equity.'" Id. at 105 (referring to section 11 of the Judiciary Act).

From there, Kolon points out that the Supreme Court explained, in York, that "[t]he suits in equity of which the federal courts have had 'cognizance' ever since 1789 constituted the body of law which had been transplanted to this country from the English Court of Chancery." Id. And, "this system of equity derived its doctrines, as well as its powers, from its mode of giving relief." Id. (internal quotation marks omitted). According to Kolon, those statements show that, notwithstanding Erie and the 1948 revision of the Judicial Code, the federal

jurisdictional statutes require the application of what Kolon refers to as "federal injunction law" in this case, and that DuPont, therefore, must satisfy the traditional four-factor test.

2. Analysis

The passages from York on which Kolon relies appear to support Kolon's view. However, as well-illustrated by thoughtful scholarly pieces, those passages - and other decisions based on them - have generated considerable disagreement respecting their meaning and effect.

(a) Crump: Wisconsin Law Review

For instance, in The Twilight Zone of the Erie Doctrine: Is There Really a Different Choice of Equitable Remedies in the "Court a Block Away"? 1991 Wis. L. Rev. 1233, 1238 (1991), David Crump posits that Justice Frankfurter's opinion in York was "both elegant and deeply flawed." Crump then explains "that inconsistent dicta in the Supreme Court's early opinions have generated conflicting lines of decisions about the classification of equitable remedies as substantive or procedural" and "that these inconsistent decisions reflect an underlying confusion concerning the application of Erie to equitable remedies - a confusion that continues to the present day." Id. at 1233. According to Crump, there are more than "a half dozen incompatible approaches to the substance-procedure

problem that the Supreme Court has sanctioned, without overruling or distinguishing the others." Id. at 1234.

Equitable remedies . . . are a part of the twilight zone of the Erie principle. They are in the twilight zone, first of all, because they simultaneously "look" both substantive and procedural. They seem to be substantive because they are the "business end" of the rights that they enforce, and thus they determine outcomes just as surely as any substantive theory does; but at the same time, they seem to be procedural, because they define the manner of enforcement of rights rather than the rights themselves. Perhaps more importantly, however, equitable remedies are in the twilight zone for historical reasons. Early in its development of the substance-procedure distinction, the Supreme Court appears to have treated them as procedural; later decisions, however, furnish a better basis for concluding that they are substantive.

Id. at 1235-36. Crump also points out the various passages in York (some of which are the basis of Kolon's argument) that contradict each other. For example, at one point York states:

It is . . . immaterial whether [a given state rule is] characterized either as "substantive" or "procedural" in state court opinions in any use of those terms unrelated to the specific issue before us. Erie R. Co. v. Tompkins was not an endeavor to formulate scientific legal terminology. It expressed a policy that touches vitally the proper distribution of judicial power between state and federal courts. In essence, the intent of that decision was to insure that, in all cases where a federal court is exercising jurisdiction solely because of diversity of citizenship of the parties, the outcome of the litigation in the federal court should

be substantially the same, so far as legal rules determine the outcome of a litigation, as it would be if tried in a state court. The nub of the policy that underlies Erie R. Co. v. Tompkins is that for the same transaction the accident of a suit by a non-resident litigant in a federal court instead of in a state court a block away should not lead to a substantially different result

1991 Wis. L. Rev. at 1238 (quoting York, 326 U.S. at 109) (emphasis added). This was the well-known "outcome determination" test pursuant to which, as Crump puts it, "a principle or rule that 'determine[d] the outcome of a litigation' was to be treated as substantive for purposes of the Erie doctrine and therefore was to be governed by state law, even if in other contexts it might be labeled procedural." Id.

But, articulation of the "outcome determination" principle notwithstanding, Justice Frankfurter, later in York, attempted to protect the tradition of the equity jurisdiction of the federal courts and to carve out an exception for equitable remedies:

This does not mean that whatever equitable remedy is available in a state court must be available in a diversity suit in a federal court, or conversely, that a federal court may not afford an equitable remedy not available in a state court. Equitable relief in a federal court is of course subject to restrictions State law cannot define the remedies which a federal court must give simply because a federal court in diversity jurisdiction is available as an alternative tribunal to the state's courts.

Contrariwise, a federal court may afford an equitable remedy for a substantive right recognized by a state even though a state court cannot give it

Id. at 1240 (quoting York, 326 U.S. at 105-06) (emphasis added).

As Crump correctly notes, this passage "flatly contradicted the outcome determination principle" because it meant "that, if the state and federal governments differed in their treatment of equitable remedies, the 'accident' of a diversity suit in federal rather than state court would 'lead to a substantially different result,' even though that outcome was precisely the evil that the Guaranty Trust [v. York] opinion condemn[ed]."

Id. at 1240.¹⁰

Crump goes on to discuss the other approaches to the substance-procedure distinction, noting that the Supreme Court has created new tests but not overruled old ones, resulting in what he calls "the muddled soup of inconsistent principles that characterizes the Court's handling of the Erie problem." Id. at 1241. To sum up, Crump correctly states that, when deciding to grant or withhold injunctive relief, "there is a body of decisions that follow federal law, and there is a group that adopts state law." Id. at 1242.

¹⁰ Crump also notes that this "dictum . . . remains the Supreme Court's most specific pronouncement on the subject [of equitable remedies]." 1991 Wis. L. Rev. at 1241.

(b) Cross: Louisiana Law Review

John Cross's equally thoughtful article, The Erie Doctrine in Equity, 60 La. L. Rev. 173, 174 (1999), also points out that one passage of the York opinion is "difficult to square with the basic principle of limited federal judicial authority set out in the remainder of the opinion." Like Crump, Cross describes Justice Frankfurter's statements on equitable remedies as dictum, when he states, "In dictum, [Justice Frankfurter] suggested that federal courts could often diverge from state law in equity, especially on questions of remedy." Id. at 174.

Cross also explains that "court decisions that involve an actual conflict between state and federal law are split." 60 La. L. Rev. at 189. "[V]irtually all courts look to state law for the rules governing the equitable defenses of laches and unclean hands." Id. at 190 (citations omitted). Some courts require the use of state law on matters of remedy. Id. (citations omitted). Most of these decisions conclude that "because differences in remedy directly affect the outcome of litigation, the Supreme Court's later Erie cases mandate use of state law." Id. at 191 (citations omitted). Other courts rely on York to hold that a federal court is not bound by state rules dealing with remedies. Id. at 190 (citations omitted).

Cross also notes that professors Wright, Miller, and Cooper reject the dictum in York and conclude that "more recent Supreme

Court cases require a federal court to apply state rules governing equitable remedies." Id. at 191 (citing Sims Snowboards, Inc. v. Kelly, 863 F.2d 643, 647 (9th Cir. 1988) (federal court cannot grant an injunction when a state statute explicitly prohibits it); Standard Brands, Inc. v. Zumpe, 264 F. Supp. 254 (E.D. La. 1967) (state law controls whether an injunction is available in a trade secrets case); Genovese Drug Stores, Inc. v. Bercrose Assoc., 563 F. Supp. 1299 (D. Conn. 1983), vacated, 732 F.2d 286 (2d Cir. 1984) (state law controls whether injunction is available in covenant not to compete case) and others).

(c) Wright, Miller and Cooper

Wright, Miller, and Cooper also provide a thorough analysis of Erie and the "equitable-remedial-rights doctrine." 19 Charles Alan Wright, Arthur R. Miller & Edward H. Cooper, Federal Practice and Procedure § 4513 (2d ed. 2012). This treatise takes the view that the Supreme Court defined the essence of the Erie doctrine as the policy of ensuring that "the outcome of the litigation in the federal court should be substantially the same, so far as legal rules determine the outcome of a litigation, as it would be if tried in a State court." Id. (citing York, 326 U.S. at 109). The treatise also notes that the Supreme Court has held that: "Whenever that [state] law is authoritatively declared by a State, whether its

voice be the legislature or its highest court, such law ought to govern in litigation founded on that law, whether the forum of application is a State or a federal court and whether the remedies be sought at law or may be had in equity." Id. (citing York, 326 U.S. at 112.)

Wright, Miller and Cooper then articulate some instructive general conclusions. First, "[s]tate law clearly cannot commit the federal courts to grant relief contrary to restraints imposed by the Constitution or an Act of Congress." Id. (citations omitted). "Conversely, the federal courts are free to follow the practices and procedures authorized under the Federal Rules or an Act of Congress, despite the fact that a particular practice or procedure might not be available in a state court and might be viewed as 'remedial.'" Id. (citations omitted). Third, "[u]nless a Federal Rule, congressional statute, or constitutional restraint clearly is applicable, the Rules of Decision Act¹¹ as interpreted by Erie and its progeny constrains whatever inherent equitable and remedial powers federal courts possess. These decisions, at least in most cases, dictate that remedies for state-created rights be granted

¹¹ The Rules of Decision Act states: "The laws of the several states, except where the Constitution or treaties of the United States or Acts of Congress otherwise require or provide, shall be regarded as rules of decision in civil actions in the courts of the United States, in cases where they apply." 28 U.S.C. § 1652.

according to state law. Rights and remedies are closely interrelated concepts; to deviate from the state's definition of the latter often also would change the former." Id. (citations omitted).

For those reasons, Wright, Miller and Cooper take the view that "an independent federal law of remedies would be contrary to the twin aims of Erie as described in the Hanna decision," and that "[t]he existence of that [independent federal] law would encourage litigants to shop between federal and state forums and would give rise to disparate treatment among litigants." Id. (citations omitted). In Hanna v. Plumer, 380 U.S. 460 (1965), the Supreme Court held that federal, not state, practice is to be followed in diversity actions when the issue is addressed by a Federal Rule of Civil Procedure that is valid under the Rules Enabling Act¹² and the Constitution, but Hanna also explained and distinguished the "twin aims of the Erie

¹² The Rules Enabling Act states: "(a) The Supreme Court shall have the power to prescribe general rules of practice and procedure and rules of evidence for cases in the United States district courts (including proceedings before magistrate judges thereof) and courts of appeals. (b) Such rules shall not abridge, enlarge or modify any substantive right. All laws in conflict with such rules shall be of no further force or effect after such rules have taken effect. (c) Such rules may define when a ruling of a district court is final for the purposes of appeal under section 1291 of this title." 28 U.S.C. § 2072.

rule: discouragement of forum-shopping and avoidance of inequitable administration of the laws." Id. at 468.¹³

(d) Moore's Federal Practice

DuPont and Kolon cite Moore's Federal Practice to support their respective positions. Kolon cites § 65.07[1], and DuPont cites § 65.07[2]. See 13 James Wm. Moore, Moore's Federal Practice § 65.07 (2011) (entitled "Law Governing Power of Federal Courts to Grant Injunctive Relief"). Moore's provides an overview of the issue, but it does not provide an in-depth analysis nor does it discuss the implications of the eBay decision.

Section 65.07[1] states in part: "A federal court's power to grant injunctive relief depends on the jurisdiction conferred upon it by federal law." Moore's Federal Practice § 65.07[1] (citing Lauf v. E.G. Shinner & Co., 303 U.S. 323, 327-28 (1938)). "The manner of procedure in suits seeking injunctive relief is governed by federal law." Id.

¹³ When there is an applicable federal rule, courts simply apply the pertinent federal rule, noting that the rule is presumed valid under the Constitution and the Rules Enabling Act. 17A James Wm. Moore, Moore's Federal Practice § 124.05 (2011). Fed. R. Civ. P. 65 is generally applied to provide standards under which a preliminary injunction may issue in the absence of state law that expressly prohibits preliminary injunctions, but state law often determines availability of permanent injunction. Id. (citing Southern Milk Sales, Inc. v. Martin, 924 F.2d 98, 103 (6th Cir. 1991)). Rule 65 does not articulate standards for the issuance of permanent injunctions after a merits trial except as to the form of the order.

However, in section 65.07[2], the treatise also notes that: “[u]nder the Erie doctrine, the federal courts must apply the substantive law of the forum state in diversity of citizenship actions,” Moore’s Federal Practice § 65.07[2], and then observes that, “[b]ecause the nature of the relief awarded is so obviously intertwined with the substantive law being enforced, the Rules of Decision Act [28 U.S.C. § 1652] requires that state law controls such issues.” Id. The treatise concludes: “Thus, in assessing the merits of a request for injunctive relief in a diversity of citizenship action, federal courts generally will apply state law.” Id. (citing Lauf, supra, at 327-28).¹⁴

Without discussing Hanna, Moore’s Federal Practice states the Hanna test: “If a Federal Rule of Civil Procedure deals directly with an issue, the governing standard to determine the rule’s applicability in the face of conflicting state law derives not from the Rules of Decision Act but rather from the Rules Enabling Act [28 U.S.C. § 2072].” Id. Moore’s then explains that “Rule 65 merely sets forth the procedural terms for the issuance of injunctions . . . and does not itself authorize injunctive relief.” Id. “Thus, if state law created the cause of action and state law precludes an injunctive

¹⁴ This decision, which the Supreme Court issued just two months before Erie, held that “[a] Wisconsin court could not enjoin acts declared by the [state] statute to be lawful; and the District Court has no greater power to do so.” 303 U.S. at 328.

remedy, in the absence of a superseding federal statute the federal courts are precluded from granting injunctive relief." Id. (citing Sims Snowboards, Inc. v. Kelly, 863 F.2d 643, 647 (9th Cir. 1988) (federal court applying California law could not issue injunction due to California anti-injunction statute)).

The preceding brief look at scholarly works in this area (and the authorities therein cited) illustrates the extant, rather broadly based, disagreement respecting the meaning of York and the application of Erie when injunctive relief is sought in federal court where the plaintiff has proved that the defendant has violated a state statute that authorizes injunctive relief. Those works also illustrate the divergence of decisional authority respecting the topic. These thoughtful analyses also show that there is a widely held perception that the issue has not been resolved by the Supreme Court of the United States, the previously cited passages from York notwithstanding.

3. Resolution

However, for today's case, it is dispositive that the United States Court of Appeals for the Fourth Circuit has spoken directly on this admittedly complicated issue. Indeed, notwithstanding the inconsistent decisions and approaches noted by the commentators, the Fourth Circuit's decision on the point is fairly straightforward.

In Capital Tool, the Fourth Circuit concluded that the application of state law to the issuance of final injunctions in diversity cases is consistent with the principles announced in Erie when it articulated that: "There is no reason to exclude from Erie state substantive law regarding the issuance of final injunctions." 837 F.2d at 172. "This is evident from Erie's criticism of Black & White Taxicab Co. v. Brown & Yellow Taxicab Co., 276 U.S. 518, 48 S. Ct. 404, 72 L. Ed. 618 (1928), which upheld a federal injunction that would have been denied by a state court applying state law of the forum." Id. (citing Erie, 304 U.S. at 73 and 75 n.11). Referring to a decision from the Supreme Court of Virginia and another Fourth Circuit decision, the Fourth Circuit explained that those cases illustrated a principle common to both Virginia and federal law: "a complainant need not allege or prove irreparable harm when it involves a statute that authorizes injunctive relief. All that need be proved is a violation of the statute." Id. (emphasis added) (citing Va. Beach S.P.C.A., Inc. v. S. Hampton Roads Veterinary Ass'n, 329 S.E.2d 10 (Va. 1985) and Env'tl. Def. Fund., Inc. v. Lamphier, 714 F.2d 331 (4th Cir. 1983)). The Fourth Circuit observed that, in Va. Beach S.P.C.A. and Lamphier, "the complainant proved a statutory violation after a full trial on the merits, and the court properly granted a final

injunction to enforce the statute without requiring proof of irreparable harm." Id. (emphasis added).

Kolon argues that Capital Tool is not helpful to DuPont's position because it predates eBay, the discussion on the point is dictum, and Capital Tool upheld the district court's application of the "traditional factors" in determining whether to issue an injunction. Kolon is correct that Capital Tool predates eBay, but the cited text is not dictum because it was a recitation of the law to be applied in deciding the issue before the Court of Appeals: "These cases do indeed illustrate a principle common to both Virginia and federal law: a complainant need not allege or prove irreparable harm when it invokes a statute that authorizes injunctive relief. All that need be proved is a violation of the statute." 837 F.2d at 172.

It also is true that the application of the traditional factors in Capital Tool occurred because a preliminary, not a final, injunction was at issue, so no statutory violation had been proved. But that does not permit a district court to ignore what was said about the effect of Erie on the principles applicable to the granting or denial of an injunction authorized upon proof of a violation of a Virginia statute that permitted an injunctive remedy.

In Lamphier, which involved a federal statute and was cited in Capital Tool, the Fourth Circuit held, "Where a statute

authorizes injunctive relief for its enforcement, plaintiffs need not plead and prove irreparable injury." 714 F.2d at 338. The decision in Lamphier cannot be considered as authoritative after eBay and the Fourth Circuit's decision in Christopher Phelps & Assocs., L.L.C. v. Galloway, 492 F.3d 532, 543 (4th Cir. 2007), but that does not render the decision in Capital Tool of no effect because the principle applied in Capital Tool was in a case brought under the VUTSA, not a federal statute. And, in any event, the Virginia decision relied on in Capital Tool (Va. Beach S.P.C.A.) is still the controlling substantive law of Virginia. Indeed, it was cited as definitive in Levisa Coal in 2008 which also cited with approval Carbaugh v. Solem, a decision that formed the basis of the rule set out in Va. Beach S.P.C.A.¹⁵

Kolon argues that the decision in Phelps, a post-eBay decision from the Fourth Circuit, supports its position that the Fourth Circuit now has rejected the contention that Capital Tool controls here and the related contention by DuPont that, having proved a violation of the VUTSA, it is not required to show irreparable injury or the lack of an adequate remedy at law to obtain a permanent injunction. In Phelps, the Fourth Circuit, based on eBay, rejected the copyright holder's argument that it

¹⁵ See also WTAR Radio-TV v. Virginia Beach, 223 S.E.2d 895, 897 (Va. 1976).

was entitled to injunctive relief, and, in so doing, the Court of Appeals did in fact state: "The Supreme Court reaffirmed the traditional showing that a plaintiff must make to obtain a permanent injunction in any type of case, including a patent or copyright case." Id. (emphasis added). However, as in eBay, Phelps was decided based on a federal statute, not on a state law. And, Phelps understandably therefore did not mention Erie.¹⁶

Considering that Capital Tool actually addresses the effect of Erie in context of the issuance of an injunction under the VUTSA, Capital Tool must be considered to be controlling circuit law on that question. If that is to change, it will have to be changed by an *en banc* decision of the Fourth Circuit or the Supreme Court. See McMellon v. United States, 387 F.3d 329, 334 (4th Cir. 2004) (concluding that, as a matter of prudence, a three-judge panel should not exercise its power to overrule the decision of another three-judge panel and that "when there is an irreconcilable conflict between opinions issued by three-judge panels of this court, the first case to decide the issue is the

¹⁶ Another post-eBay decision from the Fourth Circuit, Bethesda Softworks, L.L.C. v. Interplay Entm't Corp., 452 Fed. Appx. 351, 2011 WL 5084587 (4th Cir. 2011) (per curiam), was decided under the Copyright Act. And, like Phelps & Assocs., Bethesda Softworks did not address Erie or state law.

one that must be followed, unless and until it is overruled by this court sitting *en banc* or by the Supreme Court.”)

It is instructive to note that, in cases decided after eBay, several courts have applied state substantive law to determine whether a permanent injunction should issue. In Deer Valley Resort Co. v. Christy Sports, L.L.C., No. 2:07CV904, 2010 WL 1065940, at *4 (D. Utah Mar. 23, 2010), the district court cited Capital Tool in support of its conclusion that it should apply Utah substantive law to determine whether a permanent injunction should issue.¹⁷ In Midland Funding LLC v. Brent, No. 3:08CV1434, 2009 WL 3086560 (N.D. Ohio Sept. 23, 2009), the court held that “[w]here federal courts are called upon to adjudicate a claim predicated on state law, under either its diversity or pendent claim jurisdiction, there appears to be no question that the ultimate issue of whether injunctive relief may issue must be decided under applicable state law.” Id. at *2 (quoting Sullivan By and Through Sullivan v. Vallejo City Unified School Dist., 731 F. Supp. 947, 956 (E.D. Cal. 1990) (citing 7 Moore's Federal Practice § 65.18[1])).

In Sensormatic Elecs. Corp. v. TAG Company U.S., L.L.C., 632 F. Supp. 2d 1147 (S.D. Fl. 2008), the court applied eBay as

¹⁷ However, the Utah district court did not address the eBay decision. In ClearOne Communications, Inc. v. Chiang, 608 F. Supp. 2d 1270, 1278 (D. Utah 2009), the court applied the eBay factors with no mention of Erie in a Utah Uniform Trade Secrets Act case.

to the patent infringement claims and Florida law as to claims under the Florida Uniform Trade Secrets Act. In United States v. Preiss, No. 1:07CV589, 2008 WL 2413895 (M.D.N.C. 2008), the court considered eBay, but concluded that “[a]n injunction may issue without resort to the traditional equitable prerequisites if a statute expressly authorizes the injunction.” Id. at *4 (citations omitted).

For the foregoing reasons, the Court finds that applying the standard for injunctive relief in eBay to DuPont’s request for a permanent injunction under the VUTSA would trench upon the rule of Erie. Hence, the Court will apply Virginia’s principles as set forth in the decisions of the Commonwealth’s highest court. Under those principles, DuPont, having proved a violation of the VUTSA, does not have to prove irreparable harm or the lack of an adequate remedy at law to receive an injunction against the actual misappropriation of its trade secrets by Kolon.

B. Given the application of Virginia law rather than the eBay standard, what are the factors under Virginia law that a district court should consider in determining whether to grant an injunction?

The conclusion that DuPont is not required to establish irreparable injury or the lack of an adequate remedy at law does not mean that DuPont is automatically entitled to injunctive relief. That much follows from the text of the VUTSA which

provides that “[a]ctual . . . misappropriation may be enjoined.” Va. Code Ann. § 59.1-337A (2011) (emphasis added). Thus, the permissive statutory text preserves the settled equity principle that the issuance of injunction is a matter of judicial discretion.

Nor does the fact that, under Virginia law, proof of a violation of the VUTSA relieves DuPont of the requirement to prove irreparable injury or the inadequacy of a remedy at law, mean that, in determining the propriety of an injunction, courts should not examine the nature and extent of the injury caused by the proven violation. That is obvious because, under the Virginia rule, it remains necessary to balance the hardships (sometimes referred to as balancing the equities) in exercising the discretionary authority to grant or deny injunctive relief. See Safeway Inc. v. CESC Plaza Ltd. P'ship, 261 F. Supp. 2d 439, 467 (E.D. Va. 2003).¹⁸ Of course, to balance the hardships, it is necessary to identify the harm (even if not irreparable) that the prevailing party will suffer without an injunction as well as the harm the party putatively to be enjoined will face if an injunction is granted.

And, under the Virginia approach, as in eBay, courts must consider how the public interest will be affected by the grant

¹⁸ Balance of the hardships is one of the four familiar factors required by eBay.

or denial of an injunction. Further, even though DuPont is not required to prove that its remedy at law is inadequate, certainly the extent to which the legal remedy provides redress for the statutory violation is pertinent, albeit not dispositive, respecting the nature of any injunction that would be issued.

With these precepts in mind, it is now appropriate to assess whether DuPont should be awarded a permanent injunction and, if so, what the scope of that injunction should be.

1. The Effect of the Monetary Judgment

First, Kolon argues that the \$920 million judgment to which it must respond renders it neither necessary nor appropriate to award an injunction to DuPont. The principal authority on which Kolon relies is Faiveley Transport Malmo AG v. Wabtec Corp., 559 F.3d 110 (2nd Cir. 2009). Faiveley involved the propriety of a preliminary injunction against use of allegedly misappropriated trade secrets *pendente lite*. In Faiveley, the Second Circuit commented that an award of damages often will provide a complete remedy for misappropriation absent a showing that, unless enjoined, the misappropriator will further disseminate the stolen secret. Id. at 118-19. That somewhat remarkable, overly simplified statement was made without the benefit of a full record, and it was dictum. But, even if the comment fit the bill in Faiveley, it cannot be considered to control here.

To begin, DuPont's judgment is not based on the value of lost sales. Thus, to proceed under the rationale of Faiveley, DuPont would have to secure an accounting to ascertain the quantum of the lost sales, and then try to enforce the resulting judgment. Meanwhile, Kolon would be free to use the stolen trade secrets to compete with DuPont generally, as well as to penetrate a new market in a new generation of para-aramid product, the so-called "new fiber technology" ("NFT").

Proof of lost sales is not an easy undertaking under any circumstance. And, given Kolon's obstructive conduct in this case (spoliation of evidence, refusal to provide its key witnesses for deposition without a lengthy fight, and strenuous resistance to post-judgment discovery), DuPont would reasonably expect to incur great difficulty in litigating against Kolon, as well as great expense. And, in this circuit, difficulty in establishing monetary damages permits injunctive relief. Multi-Channel TV Cable Co. v. Charlottesville Quality Cable Operating Co., 22 F.3d 546, 551-52 (4th Cir. 1994). That principle takes on special meaning when the damages would entail proof of the loss of customers or lost sales. Id. (citing Merrill Lynch, Pierce, Fenner and Smith v. Bradley, 756 F.2d 1048, 1055 (4th Cir. 1985)).

In fact, what Kolon really argues is that a \$920 million judgment standing alone should be an adequate remedy for DuPont.

That is a passing strange argument where, as here, Kolon asserts that it cannot even afford the premiums on an appeal bond. (Mem. Op. Mot. Stay Exec. Final J., at 6 & 14, Docket Nos. 1982 & 1983.) Moreover, Kolon may have no assets in this country, and DuPont faces the real prospect of having to secure enforcement of the judgment in Korea. And, all the while, Kolon would be free, absent an injunction, to use the stolen trade secrets to DuPont's competitive disadvantage. On this record, it cannot be said that the monetary judgment presents an adequate reason to foreclose injunctive relief.

2. The Balance of the Equities

Next, it is appropriate to balance the equities that attend the exercise of the discretionary authority to grant injunctive relief. That analysis requires an assessment of the harms facing both parties.

To begin, DuPont has lost, and irretrievably so, 149 trade secrets that lie at the heart of the ability to manufacture Kevlar® efficiently and of a very high level of quality. "Oftentimes . . . the greatest loss that results from a misappropriation is the loss of the right not to divulge a trade secret, regardless of price." Minnesota Mining & Manufacturing Co. v. Prybil, 259 F.3d 587, 609 (7th Cir. 2001). And, DuPont has suffered precisely that harm. Trade secrets that took many

years to develop and perfect are no longer the secret property of DuPont.

Moreover, that harm was inflicted by a company that seeks to compete directly with DuPont. And, the record shows that the competitor inflicted that harm for the purpose of allowing it to better compete and thus to take part of DuPont's customer base. While the potential loss of customers may not be irreparable injury, it certainly is a form of harm that is appropriately considered in balancing the equities. It is also a form of harm that can be ameliorated substantially, or at least significantly forestalled, by foreclosing the competitor from using the fruits of its theft to inflict further harm on its victim. As Prybil puts it, "The purpose of a permanent injunction is to protect trade secret owners from the ongoing damages caused by future use of trade secrets" 259 F.3d at 607. Put another way, the continued use of a purloined trade secret is a harm of significant measure that warrants injunctive relief.

Another aspect of the harm demonstrated by DuPont is that among the stolen trade secrets were the processes for use in the next generation of para-aramid technology, the so-called "new fiber technology" or "NFT." That secret information puts Kolon in a quite advantageous position in respect to DuPont as to cutting edge manufacturing technology, a position that Kolon enjoys only because it misappropriated DuPont's trade secrets.

An injunction would restore DuPont and Kolon to the respective positions, as respects the NFT, that they held before Kolon's theft.

Without doubt, an injunction would bring harm to Kolon because, at a minimum, it would be foreclosed from access to the quality control and efficiencies it set out to gain by the misappropriation, and perhaps it would be prohibited from making and selling Heracron®. However, that is not the kind of harm that would foreclose injunctive relief for the reason that an injunction preventing a misappropriator from profiting from its theft of trade secrets is not really a hardship because it "simply prevents [the misappropriator] from doing that which the law already prohibits." Universal Furniture Int'l, Inc. v. Collezione Europa USA, Inc., No. 1:04CV977, 2007 WL 4262725, at *3 (M.D.N.C. Nov. 30, 2007); Prudential Ins. Co. v. Inlay, 728 F. Supp. 2d 1022, 1032 (N.D. Iowa 2010) (noting that balance of harms favors plaintiff where injunction restricts the defendant's ability "from using information that it appears he should not be able to use at all for the [applicable] period"); Merrill Lynch, Pierce, Fenner & Smith v. Chung, No. CV01-659, 2001 WL 283083, at *6 (C.D. Cal. 2001) (balance of hardships tips heavily in favor of granting injunctive relief because an injunction merely prohibits defendants from misappropriating the

trade secrets and requires them to comply with their agreements).

And, in any event, “[t]he injury [a misappropriator] might suffer if an injunction were imposed may be discounted by the fact that the [misappropriator] brought that injury upon itself.” Nat'l Reprographics, Inc. v. Strom, 621 F. Supp. 2d 204, 230 (D.N.J. 2009) (quoting Kos Pharm. Inc. v. Andrx Corp., 369 F.3d 700, 728 (3rd Cir. 2004)). See also Gen. Motors Corp. v. Urban Gorilla, LLC, 500 F.3d 1222, 1229 (10th Cir. 2007) (quoting Opticians Ass'n of Am. v. Indep. Opticians of Am., 920 F.2d 187, 197 (3d Cir. 1990) (noting that defendant “can hardly claim to be harmed, since it brought any and all difficulties occasioned by the issuance of an injunction upon itself”)); Ideal Indus., Inc. v. Gardner Bender, Inc., 612 F.2d 1018, 1026 (7th Cir. 1979) (finding in a trademark case that a defendant who intentionally violates the law “cannot now complain that having to mend its ways will be too expensive”). Kolon has identified no harm to it other than the self-inflicted harm that comes to those who base their businesses on trade secrets stolen from a competitor.

Here, a balancing of the equities strongly favors granting an injunction to foreclose Kolon from benefitting from its misappropriation of DuPont's trade secrets. In that way, the harm to DuPont can be significantly ameliorated without any harm

to Kolon except that which it brought upon itself and which, by right, it should suffer.

3. Public Interest

DuPont argues that the public interest is best served by protecting trade secrets. See MicroStrategy, 369 F. Supp. 2d at 736 ("[T]here is certainly a significant public interest in maintaining the confidentiality of trade secrets and preventing their misappropriation."); Forestry Sys., Inc. v. Coyner, No. 1:11CV295, 2011 WL 1457707, at *2 (M.D.N.C. Apr. 15, 2011) ("[T]he public interest favors protection of trade secrets."). DuPont also argues that injunctions should be granted in cases such as this to discourage misappropriation and unfair competition. There is no doubt that it is in the public interest to protect trade secrets and to protect competitors from behavior of the sort engaged in by Kolon.

Kolon argues that decisional law also recognizes the need for on-going competition in the marketplace, that an "unreasonable restraint on trade and competition . . . harms the public interest," and that courts should consider the needs of third-party customers. Saban v. Caremark Rx, LLC, 780 F. Supp. 2d 700, 737 (N.D. Ill. 2011). Kolon argues that, because many of its customers are military and law enforcement entities, including the South Korean Army, restraining competition may compromise public safety, the safety of Korean military

personnel, and indirectly the safety of United States troops who serve with the Korean troops.

"[T]he touchstone of the public interest factor is whether an injunction, both in scope and effect, strikes a workable balance between protecting the [trade secret owner]'s rights and protecting the public from the injunction's adverse effects." ePlus, Inc. v. Lawson Software, Inc., No. 3:09CV620, 2011 WL 2119410, at *17 (E.D. Va. May 23, 2011) (citations omitted). The public interest lies also in enforcing the trade secret laws to the end that companies that work to develop quality control and manufacturing efficiencies are not forced to see their secrets stolen and then, in essence, forced to sell them to a competitor who does not have to spend time and money to develop the stolen information. As DuPont correctly argues, denying an injunction would "*ipso facto* force[] the company to sell its trade secrets to those who stole them from it." Prybil, 259 F.3d at 607. It is difficult to see how such a result serves the public interest. Indeed, that approach actually encourages companies, such as Kolon, to find ways to secure trade secrets from former employees or through industrial espionage and pay only if caught, as was Kolon here. The public interest is not served by such an approach.

In a global economy where many companies do not accord trade secrets the respect and protection extended by the Uniform

Trade Secrets Act (which is broadly in effect in this country), it serves the public interest for those who would violate the protections afforded by these laws to know that, if they steal trade secrets, they will be caught, they will be prosecuted civilly, and they will not be able to profit from that which they have stolen. And, thus, injunctive relief will help serve as a deterrent to trade secret misappropriation.

Of course, Kolon is correct in asserting that the public interest is served by competition. But, Kolon overlooks the fact that the public interest is not served by unfair competition fostered by the theft of a competitor's trade secrets. Kolon has made no showing that it even sells to military and law enforcement entities whose needs could not be otherwise met in the extant market. Hence, Kolon's arguments do not show that an injunction would harm the public interest.

For all those reasons, the public interest will be served by the grant of an injunction.

Because the balance of hardships favor an injunction, because an injunction serves the public interest, and because the VUTSA permits the award of an injunction upon proof of those factors and the proof that the VUTSA has been violated (which DuPont has shown here), the Court concludes that DuPont is entitled to injunctive relief. An injunction must be tailored to properly address the wrong that has been proved and to

effectuate the proper relief. It is time now to examine the scope and reach of the injunction to be granted.

C. Scope of the Injunction

"Injunctive relief is the most commonly sought form of relief in trade secret litigation. Indeed, that equity will protect against the unwarranted disclosure or use of a trade secret is 'settled beyond peradventure.'" 4 Roger M. Milgrim, Milgrim on Trade Secrets § 15.02[1][a] (2010) (citations omitted).

In determining the scope of the injunction, the Court must determine the temporal and geographic scope of the injunction and whether the injunction should prohibit disclosure and use of the misappropriated trade secrets or even whether the defendant should be enjoined from making the products of the kind it has manufactured with the aid of the misappropriated trade secrets (often referred to as a "production injunction").

1. Scope: Use or Production Injunction

DuPont seeks a permanent worldwide injunction against disclosure of the misappropriated trade secrets both within Kolon and outside. DuPont also seeks a permanent worldwide production injunction. Although Kolon opposes the award of any injunction, its papers offer no rationale for not enjoining disclosure of the misappropriated trade secrets. Thus, the

principal issue is whether to issue a use injunction or a production injunction.

DuPont argues that the only effective way to stop Kolon from using the stolen trade secrets is to enjoin Kolon from making Heracron® fiber at all. A production injunction, says DuPont, is necessary because Kolon simply cannot make para-aramid product without using the stolen trade secrets which, says DuPont, permeate Kolon's manufacturing process.

In General Elec. Co. v. Sung, 843 F. Supp. 776, 780 (D. Mass. 1994), the district court explained that:

The common rationale for imposing a production injunction is that, where the misappropriated trade secrets are "inextricably connected" to the defendant's manufacture of the product, a use injunction is ineffective because the misappropriator cannot be relied upon to "unlearn" or abandon the misappropriated technology.

(citing inter alia, 3 Roger M. Milgrim, Milgrim on Trade Secrets § 15.02[1][1]). Sung goes on to explain that:

An "inextricable connection" is found where the trade secrets form such an integral and substantial part of a comprehensive manufacturing process or technology that, absent the misappropriated trade secrets, the defendant would not be able independently to manufacture or design a comparable product.

Id. Sung found instructive the decision in Head Ski Co. v. Kam Ski Co., 158 F. Supp. 919, 924 (D. Md. 1958), wherein the court granted a production injunction after finding that the

"defendant's entire operation has been built upon plaintiff's techniques, methods, materials and design."

Underscoring the difficulty of enforcing an injunction limited to future use and disclosure of the misappropriated trade secrets, the court in Monovis, Inc. v. Aquino, 905 F. Supp. 1205, 1234 (W.D.N.Y. 1994), found it significant that the misappropriator would have difficulty completely divorcing his knowledge of the misappropriated trade secrets from a future production of the product to which the trade secrets related. The court explained that: "[p]ast cases have recognized the potential difficulty an enjoined party would face in not using or disclosing secret information as justifying injunctions prohibiting such party from working in the area to which the secrets relate." Id. (citations omitted).

The decision whether to issue a production injunction or a use injunction also has been influenced by the trial court's assessment of the likelihood of the misappropriator complying with a use injunction measured in part by assessing the misappropriator's conduct in effecting the misappropriation, in particular the misappropriator's utter disregard of the trade secret owner's rights. Monovis, 905 F. Supp. at 1234-35. That factor is likewise present here given the strong evidence of Kolon's complete disregard of known confidentiality agreements and the evidence that Kolon well-knew that what it needed and

what it stole was DuPont's trade secret and confidential information. Kolon's conduct in effecting the misappropriation evinced a brazen and rather thorough disregard of, and disrespect for, the law, as well as for DuPont's rights.

Also, courts have considered the misappropriator's conduct in the litigation as pertinent to assessing the likelihood that the misappropriator could be expected to comply with a use injunction. For example, in Monovis, the district court held that "the defendants' approach to this litigation does little to inspire confidence that they can be relied upon not to use and/or disclosure the plaintiffs' trade secrets if they were permitted to continue in the [product] field. The defendants would have to be trusted to a large extent to police themselves if they were enjoined only from use and disclosure." Monovis, 905 F. Supp. at 1235. The court concluded that the defendants' conduct during the litigation raised grave doubts whether they could be trusted "to comply faithfully with an injunction prohibiting only use and disclosure [of the misappropriated trade secrets]." Id. Similarly, in Wyeth v. Natural Biologics, Inc., No. Civ. 98-2469, 2003 WL 22282371, at *27 (D. Minn. Oct. 2, 2003), the court took into account the fact that the defendant had sought to conceal the misappropriation by destroying evidence, inter alia, in deciding that the defendant "cannot be trusted to avoid using the misappropriated process

and cannot be trusted to obey an Order that permits them to exercise any discretion."

Finally, as Sung notes, "[I]t is pertinent whether the defendant had a significant and comparable, pre-existing design of its own prior to the misappropriation of the trade secrets." General Elec. Co. v. Sung, 843 F. Supp. at 780 (citing Aerosonic Corp. v. Trodyne Corp., 402 F.2d 223, 228 (5th Cir. 1968)). If so, an injunction against production likely would not be appropriate.

Applying these principles to the factual record in this case teaches that a production injunction is both appropriate and necessary.

To begin, the record shows that, before misappropriating DuPont's trade secrets, Kolon first attempted to develop a para-aramid product without success. That occurred in the 1980's and 1990's, but Kolon abandoned those efforts. At the instance of its CVC, Chief Vision Coordinator, who is the Chief Executive Officer and the Chairman of the Board, Kolon began efforts to re-enter the para-aramid market in 2002. Thereafter, Kolon undertook various efforts to learn DuPont's trade secrets. By 2005, Kolon had been able to develop a product that could be sold in certain segments of the para-aramid markets. However, the record is equally clear that by 2006, Kolon had determined that there were still significant quality deficiencies in its

product and that there were operating deficiencies in its processes that would keep it from being competitive in the marketplace and that had to be remedied if Kolon was to make a product that was comparable to DuPont's Kelvar® or Teijin's product Twaron®. (DuPont and Teijin were the principal participants at the time, although another Korean company, Hyosung, was on the scene).

In order to achieve that objective, Kolon set out to find out how DuPont (euphemistically referred to in many trial exhibits as "Company D") operated and what processes it used in order to produce a high quality para-aramid fiber at a profitable and price-competitive production level.¹⁹ Exhibit after exhibit illustrated how important this was to Kolon. In sum, Kolon's own history with the development of Heracron® illustrates that its own lengthy efforts (beginning in 1980 and continuing until 1995 and resuming again in 2002 for the next four years, a period of twenty years) had not produced a comparable product that would permit it to compete with DuPont and Teijin. Hence, it cannot be said that Kolon "had a significant and comparable, pre-existing design of its own prior to the misappropriation of the trade secrets." General Elec. Co. v. Sung, 843 F. Supp. at 780.

¹⁹ Some documents suggest that these undertakings were but an extension of efforts that were begun in 2002.

Second, the record here establishes that Kolon incorporated the misappropriated trade secrets into virtually every stage of the process of manufacturing Kolon's para-aramid fiber, Heracron®. Without doubt, the misappropriated trade secrets are inextricably intertwined in Kolon's production line and operating processes which, in significant respects, mirror the processes and alignments that DuPont uses in its production line which employs the trade secrets that Kolon misappropriated. It would be virtually impossible for Kolon to manufacture Heracron® without using DuPont's misappropriated trade secrets. Nor, in any event, given the extensive studying of the misappropriated trade secrets effectuated by Kolon, would it be possible for Kolon's employees to unlearn the secrets that were misappropriated.

The record here, as did the record in Sung, teaches that Kolon cannot independently manufacture a para-aramid product without using the misappropriated trade secrets because those secrets form such an integral and substantial part of Kolon's para-aramid manufacturing process. For the same reasons that animated the entry of a production injunction in Sung, the Court concludes that a production injunction is necessary here to effectuate complete relief to DuPont.

Third, a production injunction is warranted because Kolon's conduct here, as did the misappropriator's conduct in Monovis,

teaches that Kolon cannot be relied upon to police an injunction that prohibits only use and disclosure of the misappropriated trade secrets. The record shows that Kolon knew full well that former employees of DuPont whom it retained, or sought to retain, to get access to DuPont's trade secrets were under contractual obligations not to disclose the very kind of information that Kolon needed and that it misappropriated. Nonetheless, Kolon induced those former employees to breach those agreements.

The record also shows that Kolon was not satisfied with receiving trade secrets in briefings from Mitchell. So it resorted to a more devious tactic: it surreptitiously stole the contents of Mitchell's computer. Kolon's conduct shows a complete disregard for DuPont's trade secret rights and a disregard for the law that protects such secrets. And, as in Wyeth, Kolon's employees tried to conceal the misappropriation by destroying evidence. E.I. DuPont de Nemours and Co. v. Kolon Industries, Inc., 803 F. Supp. 2d 469 (E.D. Va. 2011). On this record, the Court has no confidence that Kolon could be relied upon to police its own activities (even if its employees could "unlearn" the stolen secrets) if the injunction were confined to a prohibition against use and disclosure of the misappropriated trade secrets. See Monovis, 905 F. Supp. at 1235. In sum, the only effective way to assure that Kolon will not use the

misappropriated trade secrets is to enjoin Kolon from producing para-aramid products.

2. Geographic scope of the injunction

DuPont asserts that "the injunction should have worldwide scope." (Pl.'s Mem. Supp. Perm. Inj., at 19.) In support of that proposition, DuPont asserts, indeed, that "[i]t is inappropriate to impose geographic limitations on the scope of injunctions in trade secret cases. Restatement (Third) of Unfair Competition, § 44 cmt. d (1995)." Id. DuPont relies also on Nordson Corp. v. Plasschaert, 674 F.2d 1371 (11th Cir. 1982) and Lamb-Weston, Inc. v. McCain Foods, Ltd., 941 F.2d 970 (9th Cir. 1991).

DuPont correctly cites the Restatement (Third) of Unfair Competition, § 44 cmt. d for the proposition that "[g]eographic limitations on the scope of injunctive relief on trade secret cases are ordinarily inappropriate." The Restatement goes on to say that "[a] defendant would normally be enjoined from disclosing or using the trade secret even outside the geographic market of the trade secret owner." In Lamb-Weston, Inc. v. McCain Foods, Ltd., the Ninth Circuit considered a case of misappropriation of trade secrets under Oregon law which was predicated on the Uniform Trade Secrets Act. The court approved a worldwide injunction against the misappropriator explaining that: "[a]n injunction in a trade secrets case seeks to protect

the secrecy of the misappropriated information and to eliminate any unfair head start the defendant may have gained." Lamb-Weston, 941 F.2d at 974 (citing Winston Research Corp. v. Minnesota Mining & Mfg., 350 F.2d 134, 141 (9th Cir. 1965)). The Court of Appeals held that "[a] worldwide injunction here is consistent with those goals because it 'places [the defendant] in the position it would have occupied if the breach of confidence [the misappropriation] had not occurred prior to the public disclosure, . . .'" Id. (citing Winston Research Corp. v. Minnesota Mining & Mfg. at 142.)

In Nordson Corp. v. Plasschaert, the Eleventh Circuit held that, "[i]n the abstract, most confidential information is worthy of protection without geographic limitation because once divulged the information or the fruits of the information quickly can pass to competitors anywhere in the world." 674 F.2d at 1377 (citing Blake, Employee Agreements Not to Compete, 73 Harv. L. Rev. 625, 667-84 (1960)). The court also noted that "[a]s a practical matter, however, geographical limits often can be set." Id. That is, of course, a function of tailoring the injunction to the circumstances of the case. In Nordson, the district court had limited the injunction to Western Europe as well as the United States and Canada, thereby extending its reach extraterritorially. All three authorities clearly

illustrate that an injunction, extraterritorial in scope, is appropriate in a trade secret case.

The Restatement provides guidance respecting both the scope of the injunctive relief and the appropriateness of injunctive relief, identifying several factors, including:

- (a) The nature of the interest to be protected;
- (b) The nature and extent of the appropriation;
- (c) The relative adequacy to the plaintiff of an injunction and of other remedies;
- (d) The relative harm likely to result to the legitimate interests of the defendant if an injunction is granted and to the legitimate interests of the plaintiff if an injunction is denied;
- (e) The interests of third persons and of the public;
- (f) Any unreasonable delay by the plaintiff in bringing suit or otherwise asserting its rights;
- (g) Any related misconduct on the part of the plaintiff; and
- (h) The practicality of framing and enforcing the injunction.

Restatement (Third) of Unfair Competition § 44(2).

Most of those factors have been discussed previously but, it is wise to comment on them in determining the scope of injunctive relief.

The nature and extent of the interest to be protected is the extremely valuable secret information about the operation of a para-aramid fiber manufacturing line to produce high quality

product in an economically efficient way that allows the end product to be economically competitive. Quite obviously that is an extremely important interest.

The nature and extent of the misappropriation is discussed above but, it is wise to recall, at this point, that the misappropriation by Kolon was pervasive and that the misappropriation involves virtually every significant stage of the process for the production of para-aramid fiber.

The damage remedy is, as explained above, insufficient to protect the plaintiff's interest against disclosure and against the competitive use of its own trade secrets against it in the competitive marketplace. Further, contrary to Kolon's assertion, the fact that DuPont secured a jury award of \$920 million does not demonstrate an adequate remedy, particularly where, as here, DuPont is experiencing great difficulty in enforcing the judgment and Kolon asserts that it cannot even afford the premium on an appeal bond. In any event, even if Kolon were being cooperative in the enforcement process, the process would likely take years because it must be prosecuted and pursued in a foreign country; and, in the interim, absent an injunction, Kolon would be using the great number of misappropriated trade secrets to DuPont's competitive disadvantage, including in a cutting edge area of the manufacture of para-aramid product (the NFT processes).

The relative harm to the defendant and to the plaintiff has been previously discussed as have the interests of third persons and the public. There is no unreasonable delay by DuPont in bringing suit or asserting its right. Kolon, as previously discussed, has engaged in misconduct by trying to destroy evidence of the misappropriation. And, Kolon's conduct in effecting the misappropriation was egregious (the jury found it to be willful and malicious). Both circumstances may be taken into account in assessing the likelihood of its compliance with an injunction limited to disclosure and use.

It is not at all impractical to frame an appropriate injunction. And, as will be discussed later, it may be enforced readily through the contempt processes of the Court. Accordingly, the various factors which the Restatement suggests should be assessed in determining the scope of injunctive relief augur in favor of a worldwide injunction in order to "protect the secrecy of misappropriated information and to eliminate any unfair head start the defendant may have gained." Lamb-Weston, supra, at 974.

In response to the showing made by DuPont, Kolon does not address the substance of the principles announced in the Restatement, Lamb-Weston, or Nordson. Instead, Kolon takes the view that "the Fourth Circuit follows a markedly cautious approach given the issues of jurisdiction, enforcement and

comity," and contends, relying on Lanham Act cases, that an extraterritorial injunction is not appropriate. (Def.'s Mem. Opp'n Perm. Inj., at 20). In support of its position, Kolon relies principally on the decision in Nintendo of America, Inc. v. Aeropower Co. Ltd., 34 F.3d 246, 250 (4th Cir. 1994), wherein the Court of Appeals vacated an extraterritorial injunction because the district court failed to consider all of the factors in Steele v. Bulova Watch Co., 344 U.S. 280, 285-86 (1952). Kolon finds fault with DuPont because it did not make any assessment of those factors in its opening brief.

In Nintendo, the district court issued an injunction barring the defendant from infringing trademarks and copyrights of Nintendo in the United States, Mexico and Canada. The Fourth Circuit examined the powers of federal courts to enter injunctive decrees having extraterritorial reach under either the Lanham Act or the Copyright Act. Because that power is more extensive under the Lanham Act, the Fourth Circuit looked at the district court's power to enter such a decree only under the Lanham Act. Nintendo, 34 F.3d at 249-50. As the predicate for its analysis, the Fourth Circuit examined the principles announced in Steele v. Bulova Watch Co. (also a Lanham Act case) and concluded that, before issuing an extraterritorial injunction under the Lanham Act, a district court must consider three basic factors: (1) the effect of activity to be

enjoined on American commerce; (2) the defendant's citizenship; and (3) the possible interference with the sovereignty of the nation within whose borders the extraterritorial conduct was to be prohibited. Nintendo, 34 F.3d at 250. The Court of Appeals reversed the extraterritorial injunction and remanded the case for further proceedings because the district court had not considered the second and third of the factors.

In Vanity Fair Mills, Inc. v. T. Eaton Co., Ltd., 234 F.2d 633 (2nd Cir. 1956), the Second Circuit construed Steele v. Bulova Watch Co. to require a substantial effect on American commerce. Id. at 642. And, it appears that the Fourth Circuit adopted that approach in its decision in Nintendo.

Of course, this case does not arise under the Lanham Act. It is in this Court by virtue of diversity jurisdiction. And, the claim at issue is based on the substantive law of the forum state, not federal law. Accordingly, it does not appear that the rule in Nintendo or Steele v. Bulova Watch Co. would even apply to assessing the propriety of an extraterritorial injunction in this case.

In Contour Design, Inc. v. Chance Mold Steel Co., No. 09CV451, 2010 WL 4774283 (D.N.H. 2010), the district court considered the extraterritorial application of an injunction sought in that case in which there was asserted a breach of an employment contract and a violation of the New Hampshire Uniform

Trade Secrets Act. The record was somewhat "muddled" as to whether the plaintiff was seeking the injunction based on a breach of the nondisclosure agreement or a violation of the NHUTSA so the court limited its analysis to the issuance of an extraterritorial injunction under the breach of contract claim. Noting first that it had personal jurisdiction over the defendants, both corporations organized under the laws of Taiwan, and that the case did not involve a federal statute, the court concluded that the First Circuit's test for extraterritorial application of the Lanham Act (McBee v. Delica Co., Ltd., 417 F.3d 107 (1st Cir. 2005)) simply did not apply. In that regard, the court held that, because its "subject matter jurisdiction does not rest on the Lanham Act or on any federal statute, but on diversity jurisdiction, the plaintiff did not have to demonstrate that it had satisfied the "substantial effects test" specified in the First Circuit's formulation of the Steele v. Bulova test in McBee. Contour Design, supra, at *12.

The Court shares the view that neither Nintendo nor Steele v. Bulova Watch Co. applies beyond its terms, i.e., in situations involving the Lanham Act or a federal statute dealing with extraterritorial jurisdiction. That is the teaching of the Restatement (Third) of Unfair Competition, Lamb-Weston, and

Nordson, and, indeed, the decision in Steele v. Bulova Watch Co. and its progeny.

Further, fundamental principles of equity jurisdiction support that view. For example, it is settled that "equity will not suffer a wrong without a remedy." John N. Pomeroy, Pomeroy's Equity Jurisprudence and Equitable Remedies: A Treatise on Equity Jurisdiction, §§ 364, 423 & 424 (1905). Additionally, "[a] court of equity ha[s] unquestionable authority to apply its flexible and comprehensive jurisdiction in such a manner as might be necessary to the right administration of justice between the parties." Seymour v. Freer, 8 Wall. 202, 218 (1869) (quoted in Grupo Mexicano de Desarrollo S.A. v. Alliance Bond Fund, Inc., 527 U.S. 308, 336 (1999)). And, as explained in Grupo Mexicano, "[a] dynamic equity jurisprudence is of special importance in the commercial law context." 527 U.S. at 337. Indeed, in Steele v. Bulova Watch Co., the Supreme Court held that: "Where, as here, there can be no interference with the sovereignty of another nation, the District Court in exercising its equity powers may command persons properly before it to cease or perform acts outside its territorial jurisdiction." 344 U.S. at 289.

These decisions counsel that the contentions of Kolon respecting the controlling nature of Nintendo and Steele v. Bulova Watch Co. are erroneous. Here, Kolon is properly before

the Court having appeared and defended in this case and having initiated its own counterclaim (notwithstanding that the counterclaim was, for administrative purposes, severed so that it could proceed on a different schedule). Thus, assuming that an injunction is otherwise appropriate, it lies within the equity power of the Court to command Kolon to cease or perform acts outside the territorial jurisdiction of the court. Steele v. Bulova Watch Co., 344 U.S. at 289.

If necessary, the orders of the court can be enforced through contempt proceedings. See Bradley v. American Household, Inc., 378 F.3d 373, 378 (4th Cir. 2004) (noting that one of the purposes of civil contempt sanctions is "to coerce the contemnor into compliance with court orders"); Spallone v. United States, 493 U.S. 265, 276 (1990) ("[C]ourts have inherent power to enforce compliance with their lawful orders through civil contempt.") (quoting Shillitani v. United States, 384 U.S. 364, 370 (1996)).

Even if principles announced in Steele v. Bulova Watch Co. and Nintendo were to apply, they are satisfied on this record. First, it is without question that the protection of trade secrets is important "to the subsidization of research and development and to increase economic efficiency within large companies through dispersion of responsibilities for creative developments." Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470,

481 (1974). Also, "[t]he maintenance of standards of commercial ethics and the encouragement of invention are the broadly stated policies behind trade secret law. 'The necessity of good faith and honest, fair dealing, is the very life and spirit of the commercial world.'" Id.

Moreover, the record is clear that Kolon's misappropriation involves trade secrets that are central to the manufacture of Kevlar® and that Kolon's intent in misappropriating the trade secrets was, in significant part, to enable it to penetrate the market in the United States which, absent its misappropriation, Kolon's Heracron® product was demonstrably unable to do. Kevlar® is an important product to the United States and in the United States, and the effects of misappropriation here certainly affect commerce with the United States.

The effects on American commerce include harm to American corporations such as DuPont, Calvin Klein Industries, Inc. v. BJK Hong Kong Ltd., 714 F. Supp. 78, 80 (S.D.N.Y. 1989) (noting that harm can include a diversion of sales), and "a substantial effect on commerce may be found where the defendant's activities are supported by or related to conduct in United States commerce." Id. It is beyond serious question that the loss of trade secrets respecting the manufacture of a key product, such as Kevlar®, is a harm to an American corporation. And, it is undisputed that some aspects of the misappropriation occurred in

the United States and that Kolon tried to sell its products that were made by use of the misappropriated trade secrets through its wholly-owned United States subsidiary. Kolon only makes its para-aramid product in South Korea. If Kolon is not enjoined from making that product, Kolon will be selling its products (made by using the misappropriated trade secrets) in the United States, thereby significantly affecting United States commerce.

See Basis Int'l Ltd. v. Research In Motion Ltd., 827 F. Supp.2d 1302, 1306 (D.N.M. 2011) ("[T]his Court may issue an injunction [under the Lanham Act] having extraterritorial effect . . . where: the extraterritorial conduct would, if not enjoined, have a significant effect on United States Commerce . . .").

In McBee v. Delica Co., Ltd., 417 F.3d 107, 119 (1st Cir. 2005), the First Circuit put the substantial effect component in context. The court noted that "[o]ne can easily imagine a variety of harm to American commerce arising from wholly foreign activities by foreign defendants." And, the court observed that: "[f]urther, global piracy of American goods is a major problem for American companies: annual losses from unauthorized use of Untied States trademarks, according to one commentator, now [in 2005] amount to \$200 billion annually." Id.

In assessing the need for extraterritorial enforcement of the Lanham Act, the court looked for guidance to antitrust and Lanham Act cases, pointing out that:

In both the antitrust and Lanham Act areas, there is a risk that absent a certain degree of extraterritorial enforcement, violators will either take advantage of international coordination problems or hide in countries without efficacious antitrust or trademark laws, thereby avoiding legal authority.

Id.

Of course, McBee interpreted the "substantial effects" component of Steele v. Bulova Watch Co. as an aspect of subject matter jurisdiction, 417 F.3d at 118, and McBee actually made its analysis of that component in context of a subject matter jurisdiction analysis. Id. at 119-20 ("We hold that the Lanham Act grants subject matter jurisdiction over extraterritorial conduct by foreign defendants only where the conduct has a substantial effect on United States commerce."). Here, the Court has subject matter jurisdiction by virtue of diversity of citizenship, 28 U.S.C. § 1332. Accordingly, McBee, Steele v. Bulova Watch Co. and Nintendo do not apply; but, if the analysis of the substantial effects component were to apply in diversity cases, it would, as explained above, be satisfied.

Contrary to the statement in Nintendo, Steele v. Bulova Watch Co. does not explicitly identify as a factor pertinent to injunctive relief "that the defendant was a citizen of the United States." However, Steele v. Bulova Watch Co. does discuss the fact that the defendant was a citizen of the United States. And, ever since Steele v. Bulova Watch Co. was decided,

decisions under the Lanham Act have mentioned the citizenship of the defendant in one way or another in assessing extraterritorial injunctions. Some decisions discuss the defendant's citizenship in analyzing subject matter jurisdiction. See McBee, supra, at 118-20; A.T. Cross Co. v. Sunil Trading Corp., 467 F. Supp. 47 (S.D.N.Y. 1979). Others discuss the topic in assessing in personam jurisdiction and enforceability of an extraterritorial injunction, see American Rice, Inc. v. Arkansas Rice Growers Coop. Ass'n, 701 F.2d 408 (5th Cir. 1983); Basis Int'l, supra, at 1305-07, and others have mentioned citizenship of the defendant with little or no analysis. Totalplan Corp. v. Colborne, 14 F.3d 824, 830 (2d Cir. 1994).

As best the Court can discern, the defendant's citizenship is important under the Lanham Act in assessing subject matter jurisdiction and, to some extent, in determining whether the defendant is before the Court and thus can be held accountable by way of injunctive relief. Here, there is no issue of subject matter jurisdiction. And, there is no dispute that the defendant is before the Court, having defended the case and prosecuted a counterclaim. Thus, even if applicable, the second Nintendo component is satisfied.

The third Nintendo factor is whether the injunction requested here would "interfere with the sovereignty of the

nation [Korea] within whose borders the extraterritorial conduct would be prohibited." Nintendo, 34 F.3d at 250. In Nintendo, one of the countries involved had actually approved the defendant's right to use a trademark, and there was a serious question whether there was a possibility of conflict with the Canadian or Mexican trademark law. Here, no such concern exists. Kolon, of course, is a South Korean corporation, but it has submitted to the jurisdiction of the Court. And, the law of South Korea, like the VUTSA, protects trade secrets and permits injunctive relief, so there is no conflict between the VUTSA and the law of South Korea. See 3 A Guterman & R. Brown, Going Global: A Guide to Building an International Business § 39.6 (2011) (noting that remedies available under the Unfair Competition Prevention and Trade Secret Protection Act ("UCPA") include injunctions); see also M. Jager, 3 Trade Secrets Law, Appendix Q: Comparison of Trade Secret Laws for United States and Asian Nations (2012).²⁰ Indeed, it is significant that Kolon

²⁰ Article 39 of the Trade-Related Aspects of Intellectual Property Rights Agreement ("TRIPS"), the World Trade Organization agreement mandating minimum levels of intellectual property protection for member nations, is the first international treaty to protect trade secrets, which it refers to as "undisclosed information." Robin J. Effron, Secrets and Spies: Extraterritorial Application of the Economic Espionage Act and the TRIPS Agreement, 78 N.Y.U.L. Rev. 1475, 1496 (Oct. 2003). The United States and South Korea are both member nations. Thus, TRIPS may provide additional protection and reduce the potential for a clash between U.S. and Korean law. The Economic Espionage Act of 1996 ("EEA"), also addressed in

itself does not demonstrate any conflict between Korean law and enforcement of the VUTSA by a prohibitory injunction.

Kolon also relies on the decision in North Carolina, ex rel. Cooper v. Tennessee Valley Authority, 615 F.3d 291 (4th Cir. 2010) which has no real applicability here. In North Carolina, ex rel. Cooper, the district court simply applied the wrong law in direct contravention to the decision of the Supreme Court of the United States specifying the law to be applied in cases of the sort there involved. That simply is not the issue here and, unlike North Carolina, ex rel. Cooper, granting an injunction against Kolon here does not implicate principles of federalism at all. Nor does any issue in this case implicate the concerns addressed in Ciba-Geigy Corp. v. Bolar Pharm. Co., Inc., 747 F.2d 844, 854 at n. 6 (3rd Cir. 1984).

3. Duration of injunction

As a leading treatise puts it, "Usually the duration of an injunction is designed to preclude defendants' wrongful activities for a period of time reasonably necessary to protect plaintiff's interest; the period of time that would be required for independent development is the most commonly employed standard."

this article, is another attempt to protect trade secrets. This federal statute prohibits the misappropriation of trade secrets and criminalizes the theft of trade secrets. Id. at 1475 & 1486. Congress enacted the EEA because it believed state civil remedies were inadequate. United States v. Aleynikov, 737 F. Supp. 2d 173, 185 (S.D.N.Y. 2010).

4 Roger M. Milgrim, Milgrim on Trade Secrets § 15.02[1][d].

Milgrim goes on to explain that:

Independent development time may be viewed as wholly irrelevant if plaintiff's article is not publicly available and the sole disclosures to defendant were tortious disclosures.

4 Roger M. Milgrim, Milgrim on Trade Secrets § 15.02[1][e].

And, as Milgrim continues:

Simply put, while the general principle and judicial preference is to limit injunctive relief to independent development time, experience demonstrates that courts do not always adhere to a rigidly-conceptualistic test based upon that development time but instead seek to do equity and will enter an arbitrary-term injunction if needed to accomplish the equitable result.

Id.

Independent development most often occurs as a consequence of reverse engineering. However, reverse engineering is often not possible where the trade secret does not involve a tangible object that is susceptible of reverse engineering. Of course, reverse engineering or independent development can occur if clues to the secret processes and other trade secrets are available in written documents such as patents which allow for a form of reverse engineering as to manufacturing processes and like secrets.

This record establishes that, in the 1980s and the 1990s, Kolon attempted to develop a commercial para-aramid product.

That effort was not successful and, in 1995, Kolon abandoned the effort. (Trial Tr. 5067:12-15, Docket No. 1928; Kolon's Opp. Perm. Inj., Docket Nos. 1619 & 1641, Exh. 3.) According to the record, Kolon decided to resume the effort in 2002 and actually resumed its development in approximately 2004. Id. In 2005, Kolon announced that it would soon enter the para-aramid fiber market with its product Heracron®. Kolon's efforts continued, and the record permits the inference that Kolon had made some progress beyond where it stood when it abandoned its initial efforts in 1995.

However, the record shows quite clearly that, as of 2006, its manufacturing processes were slow, the quality of Kolon's para-aramid product was deficient, and Kolon had difficulty consistently manufacturing a product that was saleable even in the limited market in which it was participating. Likewise, the record shows that Kolon determined that it was necessary to develop a reliable product comparable in quality to Kelvar® and to Teijin's product, Twaron®, if it were to be a successful competitor in the market. To attempt its successful re-entry into the market, Kolon decided to secure access to DuPont's trade secrets and confidential information respecting DuPont's processes for making Kevlar® and then began actively searching for individuals formerly employed by DuPont who had an understanding of the Kelvar® technology. It negotiated

consulting agreements in 2006 and 2007 with several DuPont consultants including Michael Mitchell, the former DuPont employee whose employment was terminated in 2006 and who was convicted in 2010, upon a plea of guilty, of unlawfully passing trade secrets to Kolon. Mitchell's consulting agreement began in April 2007. The record reflects that, as of that time, Kolon had not solved its quality control, manufacturing, and operational problems.

What then does this record bespeak of independent development time? It establishes that, before misappropriating DuPont's trade secrets, Kolon had worked for almost 20 years (1980 to 1995 and 2002 to 2006) in an effort to develop a product comparable to Kelvar®. Those efforts were not successful. The record also shows that DuPont worked to develop, over a period of 30 years, the trade secrets that were misappropriated and which, the jury found, Kolon used in its own operations to make Heracron®.

This record thus bespeaks a significant lead time for the independent development of the stolen trade secrets. Taking into account the fact that Kolon, beginning in 2004, began significantly to beef up its research capacities for para-aramid fiber, and considering that a number of developments had occurred in the para-aramid field between the time that DuPont first developed Kelvar® and began its production in the early

1970s and the time of Kolon's misappropriation, it appears that a reasonable lead time for the development of the purloined trade secrets would be twenty years. However, it is also true that most of the purloined trade secrets were not amenable to ascertainment by reverse engineering. That is further confirmed by the lengthy trial testimony presented by DuPont showing how the development of the purloined trade secrets occurred as a consequence of research and development and trial and error that occurred over a period of thirty years. Further, the record shows that DuPont employed a sizeable work force that, over the years, acquired an unusual knowledge base respecting the manufacture of para-aramid fiber. The record does not permit the finding that Kolon did the same. To the contrary, the fact that Kolon found it necessary as a matter of corporate policy to misappropriate DuPont's trade secrets to augment the knowledge and efforts of its own research staff illustrates that, left to its own devices, Kolon simply would not have developed the trade secrets it misappropriated.

On the basis of this record, it is appropriate to issue an injunction against Kolon prohibiting the production of any para-aramid fiber for twenty years, as well as a permanent injunction against the use of the trade secrets, and a permanent injunction against disclosure of the trade secrets within Kolon or otherwise. Further, it is appropriate to grant to DuPont the

traditional relief of an injunction that requires the return of all purloined secrets under conditions that allow verification thereof.

CONCLUSION

For the foregoing reasons, an appropriate Injunction Order will issue and DuPont's MOTION FOR PERMANENT INJUNCTION (Docket No. 1553) will be granted to the extent herein described.

It is so ORDERED.

/s/

REP

Robert E. Payne
Senior United States District Judge

Richmond, Virginia
Date: August 30, 2012